## ITEM 414 K FLEXIBLE PIPE-TO-MANHOLE CONNECTOR

This item shall govern for the furnishing and installation of flexible pipe to manhole connector in accordance with the plans and specifications.

**MATERIALS:** A flexible Pipe-to-Manhole connector shall be employed in the connection of the sanitary and drain sewer pipe to precast manholes.

The connector assembly shall be the sole element relied on to assure a flexible watertight seal of the pipe to the manhole. The connector shall consist of a rubber gasket, an internal expansion sleeve, and one or more external compression take-up clamps.

The rubber gasket element shall be constructed solely of poly-isoprene or natural rubber, and shall meet/exceed the requirements of ASTM C-923, and shall have a minimum tensile strength of 1600 PSI. Minimum thickness of the cross-section shall be 0.275 inches.

If metal, the internal expansion sleeve shall be made of 11-gauge non-magnetic stainless steel and shall utilize no welds in its construction. Installation shall be performed using either a hydraulic or mechanical insertion tool available from the connector manufacturer.

The external compression take-up clamp(s) shall be constructed of non-magnetic stainless steel and shall utilize no welds in its construction. The clamp(s) shall be installed by torquing the adjusting screw using a torque-setting wrench available from the connector manufacturer.

Selection of the proper size connector for the manhole and pipe requirement, and installation thereof, shall be in strict conformance with the recommendations of the connector manufacturer. Any dead end pipe stubs installed in connectors shall be restrained from movement per ASTM C-923.

The finished connection shall provide sealing to 13 PSI (minimum), and shall accommodate deflection of pipe to 7 degrees (minimum) without loss of seal.

Testing of complete joints, if required, shall be conducted in strict conformance with the requirements of the connector manufacturer.

**MEASUREMENT and PAYMENT:** No measurement or direct payment for Flexible Pipe-to-Manhole Connector will be made for furnishing and installing the connector. All materials and labor required will be considered subsidiary to Item 403 "Storm Sewer Manholes and Junction Boxes" and shall be included in the unit price bid for said item.